Topic: Pollinator Protection – National Activities and Issues

Key Points: In response to the June 20, 2014 Presidential memorandum, a Federal Task Force on Pollinator Health and an EPA/OPP workgroup were formed to develop strategies to promote and foster pollinator protection nationwide. EPA R8 has a representative on OPP's pollinator workgroup. Pollinator protection became an OCSPP "Sublead Topic" area in 2015 with R8 as the sublead region and participation by all 10 regions through their pollinator coordinators.

The prevailing theory among scientists in EPA, USDA, and the global scientific and regulatory community is that the general declining health of honey bees is related to complex interactions among multiple stressors including:

- Pests (e.g., Varroa mite), pathogens (e.g., the bacterial disease American foulbrood) and viruses;
- Poor nutrition (e.g., due to loss of foraging habitat and increased reliance on supplemental diets);
- Pesticide exposure;
- Bee management practices (e.g., transportation of hives long distances to support pollination services); and
- Lack of genetic diversity.

Background/Status: The June 20, 2014, Presidential action memorandum outlined measures to create a federal strategy to promote the health of honey bees and other pollinators and highlighted the need for new public-private partnerships and increased citizen engagement. EPA and USDA jointly chair this federal task force. All federal agencies are participating. In addition to tasking multiple federal agencies to assist in addressing the factors associated with pollinator declines, the Presidential memorandum also specifically directed EPA "to engage state and tribal environmental, agricultural and wildlife agencies in the development of state and tribal pollinator protection plans."

EPA activities since the Presidential memorandum was issued include:

- The Federal Pollinator Health Task Force, co-chaired by EPA, created the National Pollinator Health Strategy, which promotes the health of honey bees and other pollinators (including birds, bats, butterflies, and insects).
- EPA's role in the strategy is mostly focused on protecting pollinators from harmful exposure to pesticides. This is challenging because pesticides are sometimes necessary to protect crops from pest damage, but they can also harm pollinators.
- EPA/OPP formed a work group in June 2014 and Region 8 is a member. This workgroup developed a "Proposal to Mitigate Exposure to Bees from Acutely Toxic Pesticide Products" that was published for comment in the FR in 2015. OPP received 113,000 comments in response to the FR Notice. Relevant comments were incorporated into the final policy paper which was then published in the FR in 2016.
- EPA's policy to mitigate exposure to exposure to bees includes:
    - Additional label restrictions on the use of acutely toxic pesticides during times when bees are most likely to be present (under the "contract pollination" scenario).
    - Under the contract scenario, applications of acutely toxic pesticides are prohibited when crops are in bloom when bees are transported to farms for pollination services. Application of pesticides during bloom can significantly affect the health of bees. Growers routinely contract with honey bee keepers to bring in bees to pollinate crops that require insect pollination.
    - While the label restrictions focus on managed bees, EPA believes that these measures will also protect native bees and other pollinators that are in and around treatment areas.
    - To address exposure to bees not under contract ("non-contract" scenario), EPA also encouraged states and tribes to reduce pesticide exposure by developing managed pollinator protection plans (MP3s). In addition, OPP is working with the Tribal Pesticide Program Council (TPPC) to assist tribes that are interested in developing P3s and Region 9 has developed a Tribal P3 template. The purpose of MP3s and P3s is to support pollinator health by facilitating communication at the local level among beekeepers, growers, applicators, universities and others and to put into place locally tailored measures to protect pollinators.

- In 2014, OPP sent letters to the SFIREG chair, AAPCO President, and TPPC chairman expressing interest in working with our co-regulators on state and tribal pollinator protection plans. AAPCO and SFIREG developed a Guidance Document for States for Developing and Implementing Managed Pollinator Protection Plans. This Guidance describes the main elements that should be included in a state MP3 and has been used by states in the plan development process. This Guidance can also be used by tribes, although Region 9 has developed a P3 template that tribes can use and the TPPC is working with OPP and interested tribes on plan development.
- To date, approximately 40 states have developed MP3s and are implementing their plans. Only 1 state (Alaska) has indicated that do not plan to develop an MP3. The MP3s serve as examples of effective communication and collaboration between stakeholders at the local level that can lead to reduced pesticide exposure and protection of honey bees while maintaining the flexibility needed by growers to protect crops. EPA believes the process of stakeholder engagement at the local level and development and implementation of MP3s/P3s is a good model for enhanced local communication and can help accomplish EPA's overall goal of mitigating exposure to bees from acutely toxic pesticides.
- Since the majority of states have final MP3s/P3s and are now implementing the plans, OPP identified the need to measure the level of success of the state plans in protecting pollinators. In late 2016, the Pesticide Program Dialog Committee (PPDC) formed a workgroup to develop and make recommendations to OPP on metrics that could be used to assess the success of the plans. The PPDC workgroup included beekeepers, University researchers, extension, state co-regulators, pesticide applicators, and pesticide industry representatives. The PPDC workgroup completed presented their recommendations to OPP and SFIREG at the end of 2017. The recommended metrics include a state survey with specific questions that will help EPA and SFIREG assess the success of state plans. SFIREG agreed to distribute the survey to states and compile results during 2018.

Other on-going EPA Pollinator Protection Activities

- EPA is implementing a science-based risk assessment process for quantifying the potential risks of pesticides to bees to support the pesticide registration and registration review programs and has also required label modifications to mitigate risks to bees from certain products that were of risk concern, including the neonicotinoids and other classes of chemicals that are acutely toxic to bees.
- EPA is expediting registration review for the neonicotinoid pesticides, moving up the final decision timing and providing specific milestones along the way.
- EPA is proposing additional restrictions on the use of acutely toxic pesticides during times when bees are most likely to be present.
- EPA is accelerating the process to register pesticides that beekeepers use to fight Varroa mites, an invasive species that the USDA has identified as the single most detrimental pest of honey bees.
- EPA has proposed a New Risk Management Approach for Protecting the Monarch Butterfly.
- EPA is issuing a plan for implementing EPA's new bee testing priorities.
- EPA is incorporating pollinator gardens at EPA facilities.
- EPA is encouraging pollinator-friendly habitat considerations in land cleanup programs, such as Superfund.
- EPA will continue to conduct chemical-specific risk assessments for insect pollinators according to the risk assessment guidance for pollinators which includes considerations beyond acute effects, including chronic effects and impacts on hive health. Based on these chemical-specific risk assessments, EPA will consider additional chemical-specific mitigation as needed.
- hosted and co-facilitated numerous conferences and meetings on pollinator protection. In May 2013, USDA and EPA released a comprehensive scientific report on honey bee health. The report states that there are multiple factors playing a role in honey bee declines, as mentioned at the beginning of this paper.

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Topic: Pollinator Protection – Region 8 Specific Activities and Issues

Key Region 8 Points:

- The top three producing honey states in the US are in Region 8: North Dakota, South Dakota and Montana.
- All R8 states have developed and currently implement managed pollinator protection plans (MP3).
- R8 and state pesticide lead agencies work together to monitor/address beekeeper complaints and concerns.
- R8 state lead agencies have concerns about the increasing amount of time and resources they must devote to pesticide enforcement cases involving honey bees.
- EPA has released "Guidance for the Inspection of Alleged Cases of Pesticide-Related Bee Mortality." R8 has partnered with Regions 4 & 5 to conduct training webinars for States & Tribes on the Bee Inspection Guidance.
- R8 worked with CSU in 2015 to develop a guide for CO beekeepers on integrated hive management for pest and disease control in beehives, including cultural, biological, and chemical control methods. This guide was distributed throughout R8 as well as several other regions.
- CSU identified the need to update the guide for CO beekeepers in 2018 and R8 is again working with CSU during FY18-19 to make needed revisions to the guide. The updated guide will be distributed in 2019.
- Since 2014, R8 has and continues to work with OCSPP as the Sublead Region for pollinator protection.

Background/Status: Beekeepers in CO, ND, and UT have raised concerns to EPA R8 about whether pesticide state lead agencies are actively pursuing violations of the honey bee hazard statements on pesticide labels. The National Honey Bee Advisory Board (NHBAB) has raised similar concerns to EPA's Office of Pesticide Programs (OPP) and Office of Enforcement and Compliance Assistance (OECA) regarding state enforcement of alleged honey bee label violations nationwide as well as concerns about the inadequacy of honey bee hazard statements that are required on certain pesticide labels.

R8 has been monitoring beekeeper complaint cases in states for several years. As part of the annual review of the State pesticide program cooperative agreements, R8 reviews all completed State enforcement cases that arise from beekeeper complaints to assess timeliness and adequacy of state investigations and determine whether appropriate enforcement actions have been taken. In order to address concerns regarding state enforcement of bee-related label language and to ensure consistency of bee-related investigations nationwide, EPA developed national guidance for the inspection of alleged cases of pesticide-related bee mortality. R8 has partnered with R4 & 5 to conduct training webinars for States & Tribes on the Bee Inspection Guidance.

Within R8, the ND Dept. of Agriculture (NDDA) developed the first MP3 in the nation several years ago. The NDDA led the SFIREG effort to write the guidance for states to use when developing MP3s. All Region 8 states have developed and are implementing MP3s. Each individual state plan is tailored to address stakeholder needs and issues within the state.

Special Note: The beekeeper's concerns should be viewed in the context of domestic honey bee depopulation (Colony Collapse Disorder or CCD), the growing alarm about CCD, and the beekeeper's position that misuse of pesticides by applicators contributes to CCD. Media reports have also linked CCD to the use of neonicotinoid pesticides, such as clothianidin and imidacloprid. It is important to note that the causes of CCD, including the role of pesticide misuse and the use of neonicotinoids, are not yet fully understood. USDA has funded a significant number of research studies on CCD as well as general honey bee health.

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